



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,707	07/03/2001	Thomas Zickell	NEI-010XX	2439

7590 06/28/2007
Bourque & Associates, P.A.
Suite 303
835 Hanover Street
Manchester, NH 03104

EXAMINER

AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
----------	--------------

1772

MAIL DATE	DELIVERY MODE
-----------	---------------

06/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/898,707

Applicant(s)

ZICKELL, THOMAS

Examiner

Walter B. Aughenbaugh

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007 and 06 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on June 5 and 6, 2007 have been entered.

Acknowledgement of Applicant's Amendments

2. New claims 45-66 have been received and considered by Examiner.
3. Applicant's cancellation of claims 21-31 and 44 has been acknowledged by Examiner.

WITHDRAWN REJECTIONS

4. All rejections that were of record in the previous Office Action mailed February 5, 2007 have been withdrawn due to Applicant's cancellation of claims 21-31 and 44 (and due to Applicant's cancellation of claims 32-43 in the After Final Amdt. filed May 1, 2007).

NEW REJECTIONS

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 45-48, 55, 56 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1772

Claim 45 recites the limitation "the substrate of the second region" in lines 12-13 and 14-15. There is insufficient antecedent basis for this limitation in the claim. The claim, prior to line 12, does not recite that the second region comprises a substrate. The claim recites that the substrate comprises first and second regions, so the substrate cannot be a component of the "second region".

Claims 46, 56 recite the limitation "said lower surface of said second region [portion in claim 56]". There is insufficient antecedent basis for this limitation in the claim.

In regard to claims 47 and 48, the "substrate" to which each claim refers cannot be ascertained since more than one "substrate" is recited in claim 45.

In regard to claim 55, the language used in claim 55 makes it impossible to ascertain the structure Applicant intends to claim (it cannot be ascertained whether portion/region and outer/bottom/upper/lower are used to delineate different locations or if these are intended to all recite the same location, and if intended to delineate different locations, the boundaries of these locations [both physically and the boundaries of the metes and bounds intended to be recited by the claim] cannot be ascertained). The location of the "first edge" cannot be ascertained.

Claim 56 recites the limitation "said upper surface of said second region". There is insufficient antecedent basis for this limitation in the claim.

In regard to claim 62, it cannot be ascertained whether the "second section" recited in line 5 of claim 62 is intended to be the same or different from the "second section" recited in line 13 of claim 62 (due to "a second section" in line 13).

Claim Rejections - 35 USC § 102

7. Claims 45-47, 52, 55-57, 60, 62 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Simpson et al. (USPN 5,096,759).

In regard to claim 45, Simpson et al. teach a rolled roofing material comprising a substrate saturated with a first asphalt composition (impregnated mat, item 92, col. 5, lines 34-62). Simpson et al. teach that the substrate includes a first region having a first layer of a second asphalt composition (coating, item 24, col. 3, lines 25-29 and col. 4, lines 36-39) contacting an upper surface of the substrate in that first region. Simpson et al. teach that the first region includes a second layer of an adhesive composition (adhesive, item 94, col. 5, lines 48-62) contacting a lower surface of the substrate in that first region. Simpson et al. teach that the substrate includes a second region disposed along at least a first edge of the substrate (edge of substrate 92, Fig. 9) where the second region has an upper and a lower surface (the upper portion of the edge of substrate 92 and the lower portion of the edge of substrate 92) that are both free of both the first and second asphalt compositions. Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach that the substrate includes a release backing (release paper, item 96, col. 5, lines 48-62) disposed over a bottom surface of the second layer (adhesive, item 94).

In regard to claim 55, Simpson et al. teach a roofing system (Fig. 11) comprising a first roofing membrane including a first, generally elongated rectangular substrate saturated with a first asphalt composition (impregnated mat, item 92, col. 5, lines 36-62). Simpson et al. teach

Art Unit: 1772

that the substrate includes an upper and a lower surface having a top edge region and a bottom edge region whereby when the first roofing membrane is applied to the roofing support the lower surface is disposed closer to the roofing support than the upper surface, and the bottom edge region is disposed closer to the roof base of the roofing support than the top edge region (col. 5, lines 48-62 and Fig. 9-11). Simpson et al. teach that the substrate includes a first region having a first layer (coating, item 24) of a second asphalt composition that contacts the upper surface of the first region and a second layer (adhesive, item 94, col. 5, lines 48-62) of an adhesive composition that contacts the lower surface of the first region, where the region where coating, item 24, and adhesive, item 94, are located corresponds to the first region as claimed (the first layer contacts the upper surface of the first region and the second layer contacts the lower surface of the first region because the first region is the region where coating, item 24, is located, Fig. 1 and 9-11). Simpson et al. teach that the substrate includes a second region disposed along at least the top and bottom edge regions of the substrate (the region at the left edge of the substrate as shown in Fig. 11 where the right edge of each unit of underlayment, item 90, overlaps with and contacts the left edge of the next underlayment, item 90, as shown in Fig. 11) where the upper and lower surfaces of the substrate are substantially free of the first and second asphalt compositions, since the upper surface of the substrate at the second region does not contact coating, item 24 and since the lower surface of the substrate at the second region does not contact an asphalt composition (Fig. 1 and 9-11). Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach an adjacent roofing membrane substantially the same as the

Art Unit: 1772

first roofing membrane (col. 5, lines 36-62 and Fig. 11) where the adhesive composition of the adjacent roofing membrane is adapted to adhere to the upper surface of the second region of the first roofing membrane such that only the granules of the first and adjacent roofing membranes are exposed to the environment when the first and adjacent roofing membranes are applied to the roofing support since the adhesive of Simpson et al. bonds to the underlayment, item 90, and coating, item 24 (col. 5, lines 55-62).

In regard to claims 46, 56 and 63, Simpson et al. teach that the rolled covering material further includes a parting agent covering (the silicon compound release coating, col. 3, lines 32-35) substantially covering the lower surface of the substrate wherein the parting agent necessarily resists adhering to the upper surface of the substrate when the covering material is rolled since it is a release coating.

In regard to claims 47 and 57, Simpson et al. teach that the substrate includes non-woven polyester (col. 5, lines 48-50), which is a fibrous material.

In regard to claims 52 and 60, Simpson et al. teach that the adhesive composition includes a rubberized asphalt material (col. 6, lines 21-34; styrene-butadiene radial block polymer is a rubber).

In regard to claim 62, Simpson et al. teach a roofing material comprising a substrate saturated with a first asphalt composition having an upper and a lower surface (impregnated mat, item 92, col. 5, lines 34-62). Simpson et al. teach that the roofing material comprises a first layer of a second asphalt composition (coating, item 24, col. 3, lines 25-29 and col. 4, lines 36-39) contacting only a first portion of the upper surface of the substrate (col. 5, lines 48-62). Simpson et al. teach that the first layer (coating, item 24) does not contact at least a first region of the

Art Unit: 1772

upper surface of the substrate (impregnated mat, item 92) disposed along at least a first edge of the substrate (col. 5, lines 36-62 and Fig. 1 and 9-11), where the first region is where the right edge of each unit of roofing, item 10, overlaps with and contacts the left edge of the next roofing, item 10, as shown in Fig. 11. Simpson et al. teach that the roofing material comprises a second layer of an adhesive composition (adhesive, item 94, col. 5, lines 48-62) contacting only a second portion of the lower surface of the substrate (col. 5, lines 36-62 and Fig. 9-11) where the second layer does not contact at least a second region of the lower surface disposed along the first edge of the substrate (the first edge is where the right edge of each unit of roofing, item 10, overlaps with and contacts the left edge of the next roofing, item 10, as shown in Fig. 11, since Applicant recites "said first edge" in line 12 of the claim, which has antecedent basis in "a first edge" recited in line 7. Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach that a release backing (release paper, item 96) is disposed over a bottom surface of the second layer (adhesive, item 94) (col. 5, lines 48-62).

Claim Rejections - 35 USC § 103

8. Claims 53, 61 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. (USPN 5,096,759).

Simpson et al. teach that the adhesive composition includes by weight 13% styrene-butadiene block polymer, 12% sand (filler), 7% oil and 63% bitumen (flux asphalt, col. 4, lines 35-39). Normally, it is to be expected that minor changes in the relative amounts of rubber, filler, oil and asphalt in an asphalt based adhesive would be an unpatentable modification. Under some

Art Unit: 1772

circumstances, however, changes such as a change to the relative amounts of rubber, filler, oil and asphalt in an asphalt based adhesive may impart patentability to an article if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

9. Claims 48-51, 58, 59, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. (USPN 5,096,759) in view of Kennepohl et al. (USPN 4,079,158).

Simpson et al. teaches the material as discussed above.

In regard to claims 48, 58 and 64, Simpson et al. fail to teach that the substrate is a fiberglass mat. Kennepohl et al., however, disclose a rolled roofing material comprising a substrate having upper and lower surfaces (backing, col. 1, line 39) where an asphalt composition saturates the substrate (col. 1, lines 38-48 and col. 3, line 65-col. 4, line 5). Kennepohl et al. teach that the substrate is a fiberglass mat (col. 8, line 66-col. 9, line 16). Therefore, one of ordinary skill in the art would have recognized to have replaced the non-woven polyester mat of Simpson et al. with the fiberglass mat of Kennepohl et al. since fiberglass mats are well known materials for use as an asphalt-saturated substrate for rolled roofing material as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the non-woven polyester mat of Simpson et al. with the fiberglass mat of Kennepohl et al. since fiberglass mats are well known materials for use as an asphalt-saturated substrate for rolled roofing material as taught by Kennepohl et al.

Art Unit: 1772

In regard to claims 49, 59 and 65, Simpson et al. fail to explicitly teach that the first and second asphalt compositions are the same. Kennepohl et al., however, disclose that the asphalt composition that saturates the substrate is also coated on the upper surface of the substrate (col. 1, lines 38-48 and col. 3, line 65-col. 4, line 5). Therefore, one of ordinary skill in the art would have recognized to have used the same asphalt composition as both asphalts of Simpson et al. since it is well known to use the same asphalt composition that saturates the substrate as a coating on the upper surface of the substrate in roofing material as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the same asphalt composition as both asphalts of Simpson et al. since it is well known to use the same asphalt composition that saturates the substrate as a coating on the upper surface of the substrate in roofing material as taught by Kennepohl et al.

In regard to claims 50 and 59, Simpson et al. teach that the asphalt composition includes a mineral filler (silica sand, col. 4, lines 45-46). Simpson et al. fail to explicitly teach that the asphalt compositions include an oxidized asphalt, Kennepohl et al. teach that oxidized asphalt (col. 7, lines 36-55) with a mineral filler (col. 1, lines 20-48) is a notoriously well known noncombustible material for use as roofing. Therefore, one of ordinary skill in the art would have recognized to have oxidized the asphalt composition of Simpson et al. since oxidized asphalt is a well known noncombustible material for use as roofing as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have oxidized the asphalt composition of Simpson et al. since oxidized asphalt is a well known noncombustible material for use as roofing as taught by Kennepohl et al.

Art Unit: 1772

In regard to claims 51, Simpson et al. fail to teach that the mineral filler is limestone. Kennepohl et al. teach that the asphalt composition includes limestone as the mineral filler (col. 5, line 62-col. 6, line 3). Therefore, one of ordinary skill in the art would have recognized to have used limestone as a mineral filler in the asphalt of Simpson et al. since limestone is a well known filler for noncombustible material for use as roofing as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used limestone as a mineral filler in the asphalt of Simpson et al. since limestone is a well known filler for noncombustible material for use as roofing as taught by Kennepohl et al.

In regard to claims 54, while Kennepohl et al. and Simpson et al. fail to explicitly teach that the first asphalt composition and the second asphalt composition each have a fuel content wherein the fuel content of the asphalt compositions is low enough such that the asphalt compositions are fire resistant, Kennepohl et al. teach that the composite building material of Kennepohl et al. has superior fire retarding properties (col. 5, lines 62-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adjusted the fuel content of the asphalt compositions to determine the fuel content that yields the optimum fire resistance to achieve fire resistant asphalt compositions depending on the desired end user result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Art Unit: 1772

Response to Arguments

10. The language used in claims 45, 55 and 62 makes it impossible to ascertain the structure of the claimed sheet (claims 45 and 62)/material (claim 55) Applicant intends to claim.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is (571) 272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Walter B. Aughenbaugh

6/25/07

Walter B Aughenbaugh
6/25/07